



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 09/690,574 Confirmation No. 3531

Applicant : Mike Daily, et al.

Filed : October 17, 2000

T.C./A.U. : 2686

Examiner : Keith Ferguson

Docket No. : HRL048

Customer No. : 28848

Mail Stop: Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Washington, D.C. 22313-1450

BRIEF ON APPEAL (Amended)

Sir:

This is an appeal from the Final Rejection, dated August 9, 2004, for the above-identified patent application. The Appeal Brief was originally filed on February 28, 2005 (and received in the Patent Office on March 03, 2005). A Notification of Non-Compliant Appeal Brief was mailed on July 06, 2009, stating that (1) the Appeal Brief fails to contain the appropriate headings, (2) the Appeal Brief fails to provide the status of all the claims filed in the application, (3) the “Summary of Claimed Subject Matter” fails to argue each independent claim separately, and (4) the Notice of Appeal was filed without the appropriate filing fee of \$500.00. The Appeal Brief has been amended to address the issued identified above. Regarding the Notice of Appeal fee, the Notice of Appeal was originally filed on December 30, 2004, WITH the fee of \$500.00. Record of the fee can be found in PAIR in the document entitled, “Notice of Appeal Filed,” as recorded in the mail room on July 30, 2007. Nevertheless, to avoid further delay, the Applicants AGAIN submit the Notice of Appeal Fee (included herewith). Thus, the Appellant respectfully requests that the Examiner accept this Appeal Brief.

REAL PARTY IN INTEREST

The present application has been assigned to HRL Laboratories, LLC of Malibu, CA.

RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences related to this application.

STATUS OF CLAIMS

Claims 1-64 are pending in the Application. Of those, Claims 1, 14, 26, 35, and 36 were cancelled. Claims 42-64 were allowed. Claims 9, 10, 21, 22, 34, and 41 were objected to, while Claims 2-8, 11-13, 15-20, 23-25, 28-33, and 37-40 were under final rejection as a result of the Final Office Action dated August 9, 2004.

The Appellant appeals from the rejection of Claims 2, 4, 13, 15, 16, 24, 28, 29, 30, 37, and 38. Further, the Appellant submits that the remaining claims, Claims 3, 5-12, 17-23, 25, 27, 31-34, 36, and 39-41 are patentable at least through their dependence upon an allowable base claim. A copy of all claims of the application is contained in the attached Claims Appendix, provided herewith as Appendix A.

STATUS OF AMENDMENTS

No Amendment After Final Rejection has been entered.

SUMMARY OF CLAIMED SUBJECT MATTER

The invention described and claimed in the present application relates to a method and apparatus that enables a user to access embedded information associated with a specific location by another user (*See Specification*, page 2, lines 16-18). In other words, the present invention allows querying of an information server based on user position and orientation data. The device according to the present invention is comprised of a user interface, a position sensor, an information server, and a playback manager, as is claimed in Claims 2, 15, 28, and 37 (*See Specification*, page 2, lines 21 and 28). The user interface provides a user with the ability to submit queries to a database and also provides information back to the user, as is claimed in Claims 2, 15, 28, and 37 (*See Specification*, page 2, lines 22-23). The position sensor is comprised of a variety of complimentary sensors that provide user position (i.e., position data) and orientation (i.e., orientation data) to assist with the user-generated queries, as is claimed in Claims 2, 15, 28, and 37 (*See Specification*, page 3, lines 1 and 2). The information server takes the position data and the information request and queries the database, references are then sent to the playback manager, and the playback manager delivers the location-specific information to the user interface, as is claimed in Claims 2, 15, 28, and 37 (*See Specification*, page 3, lines 2-5).

Additionally, the playback manager delivers the preference filtered information to the user interface, as is claimed in Claim 3 (*See Specification*, page 3, lines 4-5).

Additionally, audio information can be spatially enhanced based on user position and orientation to appear to be coming from the area or object with which the audio is associated, as is claimed in Claims 4, 16, 30, and 38 (*See Specification*, page 3, lines 7 and 8).

In cases where only textual information is associated with the location, the user has the option of displaying the text (i.e., the information is provided to the user as text), as is claimed in Claims 5, 17, 31, and 39 (*See Specification*, page 5, lines 11-13).

Alternatively, the textual information is translated to spoken language as selected by the user, as is claimed in Claims 6, 18, 32, and 40 (*See* Specification, page 3, lines 8-10). In situations where the information is available only in a language other than the user's language of choice, the information is translated to spoken language as selected by the user, as is claimed in Claims 7 and 19 (*See* Specification, page 3, lines 8-10).

The database of location specific information is either contained in a distributed web based information server networked to a plurality of information sources or a dedicated independent server, as is claimed in Claims 8, 20, and 23 (*See* Specification, page 3, lines 10-13).

Retrieved information can be user-annotated or user-modified, subject to parameters dictated by the system administrator, as is claimed in Claims 9, 10, 21, 22, 34, and 41 (*See* Specification, page 3, lines 13-14). This information can be accessed and modified or annotated by two-way telecommunication devices, as is claimed in Claims 11 and 23 (*See* Specification, page 5, lines 10-11). The user interface is not limited to a cellular phone; it can be any fixed or mobile communication device including traditional phones, computers, transceivers, radios, or mobile phones, as is claimed in Claim 12 (*See* Specification, page 3, lines 14-16). The location of interest can be determined four ways: from the user's position, from the user's expected destination based on orientation, from a stationary user's reported destination, and from the user's designation (i.e., user input) of a remote location, as is claimed in Claims 13, 24, 25, and 29 (*See* Specification, page 3, lines 16-18).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Issue 1 – Are Claims 2-5, 8, and 11-13 anticipated under 35 USC 102(e) by U.S. Patent Publication No. 2003/0060211 to Chern et al., herein referred to as the “Chern reference?”

Issue 2 – Are Claims 15-17, 20, and 23-25 anticipated under 35 USC 102(e) by the Chern reference?

Issue 3– Are Claims 28-31 and 33 anticipated under 35 USC 102(e) by the Chern reference?

Issue 4 – Are Claims 37-39 anticipated under 35 USC 102(e) by the Chern reference?

5 Issue 5 – Are Claims 6, 7, 18, 19, 32, and 40 obvious under 35 USC 103(a) over the Chern reference in view of U.S. Patent No. 5,870,454 to Dahlén?

ARGUMENT

Issue 1 – Are Claims 2-5, 8, and 11-13 anticipated under 35 USC 102(e) by U.S. Patent Publication No. 2003/0060211 to Chern et al., herein referred to as the “Chern reference?”

10 In sections 2 and 3 of the Office Action of August 9, 2004, the Examiner rejected Claims 2-5, 8, and 11-13 under 35 USC §102(e) as being anticipated by U.S. Patent Publication No. 2003/0060211 to Chern et al. The Appellants submit that the Chern reference does not describe each and every element as set forth in the rejected claims.

15 The Appellants submit that for many of the claims rejected under 35 USC 102(e), the Examiner reached an improper conclusion as to the teachings of the Chern reference and incorrectly interpreted the limitations of the rejected claims. As stated in MPEP 2111, the claims must be “given *<their> broadest reasonable interpretation consistent with the specification,” citing to *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000).

20 However, the “broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach.” MPEP 2111 quoting *In re Cortright*, 165 F.2d 153, 1359 (Fed. Cir. 1999). As discussed below, the Appellants submit that the Examiner had not given the rejected claims the broadest reasonable interpretation consistent with either the specification or with the interpretation that those
25 skilled in the art would reach. Therefore, when the rejected claims are given their broadest reasonable interpretation, the Appellants assert that the Chern reference does not describes each and every element as set forth in the rejected claims.

Claim 2

Regarding Claim 2, the Examiner asserted, in the Final Office Action, that that the Chern reference discloses orientation data to assist with user-generated queries, pointing to paragraphs 0040, 0084, and 0085. In the Final Office Action, the Examiner repeated his belief that the Chern reference teaches a GPS system that provides orientation data. The Examiner further indicated that he has addressed the limitations that are in the claims that are the broadest reasonable interpretation consistent with the specification. The Appellants disagree with the characterization of the Chern reference by the Examiner, and submit that the Examiner's interpretation of the claims is neither consistent with the specification, nor with the conclusion which would be reached by one skilled in the art.

In order to establish a prima facie case of anticipation, the Examiner must set forth an argument that provides (1) a single reference (2) that teaches or enables (3) each of the claimed elements (as arranged in the claim) (4) either expressly or inherently and (5) as interpreted by one of ordinary skill in the art. All of these factors must be present, or a case of anticipation is not met. Thus, "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). The Appellants submit that the Chern reference does not teach, disclose, or suggest "orientation data" as is claimed in Claim 2.

Claim 2 claims, in part, "... the position detection system is comprised of a variety of complimentary devices that provide user position data to assist with the user-generated queries; ... wherein said position detection system further provides orientation data to assist with user-generated queries." (emphasis added) Thus, Claim 2 claims both user position data and orientation data.

In the Final Office Action and in the Advisory Action, the Examiner again asserted that he interpreted the position data of a GPS system disclosed by Chern to teach the position data and orientation data claimed in Claim 2.

First, the Appellants submit that if position data were the same thing as orientation data then the Appellants would not have included both terms in the claims and in the specification. Further, the Appellants supplied different definitions in the specification for each term. The paragraph spanning pages 7 and 8 of the application and

in the first full paragraph on page 8 provide examples of what is meant by “position data” and “orientation data.” The paragraph spanning pages 7 and 8 of the application provides an interpretation of “position data,” stating “the system requires either that the user’s position be manually entered by the user, or that the system to receive the user’s position form an automatic position-sensing device 202 such as a global positioning system (GPS).” The first full paragraph on page 8 provides an interpretation of “orientation data,” stating “[a]dditional embodiments of the present invention allow explicit querying of the information server 100 based on the position and orientation of the user. Such querying can be achieved with the aid of a body-worn device such as a compass that transmits the orientation of the user to the information server 100.” Thus, the Appellants submit that position data is not the same thing as orientation data.

Second, the Appellants submit that the Examiner’s assertion that GPS systems provide orientation data is not a conclusion that would be reached by one skilled in the art. One skilled in the art would understand that GPS systems do not provide orientation data. Appendix B includes a definition of a GPS system from Encyclopedia Britannica Online® where GPS is defined to be a system where one can quickly and accurately determine latitude, longitude, and in most cases altitude of a point on or above the Earth’s surface. The Appellants submit that one skilled in the art would appreciate that a GPS system provides position data. The Appellants provide Appendix C with the Merriam-Webster’s Online Dictionary ® definition of position, the relevant definition being 3a: the point or area occupied by a physical object. Thus, the GPS system provides position data.

In contrast, the term “orientation” is defined as the act or process of orienting or being oriented; or the state of being oriented, as shown in Appendix D which is the definition of orientation from Merriam-Webster’s Online Dictionary ®. Appendix E shows the relevant definition of orient as 1b: to set or arrange in any determinate position especially in relation to the points of the compass. There is no mechanism of the GPS satellites to provide orientation data. The GPS system can provide information on where a person is on a map, but not the orientation (direction) the person is facing. Thus, the Appellants submit that the Chern reference, in teaching a GPS system, does not teach, disclose or suggest “orientation data” as is claimed in Claim 2.

In light of the foregoing, the Appellants submit that consistent with the specification, position data is not the same thing as orientation data, position data being something that can be obtained from GPS and orientation being something that requires directional information from a device such as a compass.

5 The Appellants submit that while the Chern reference does teach providing position data, the Chern reference does not teach, disclose or suggest orientation data, as is claimed in Claim 2. In the Chern reference, paragraph 0040 refers to a position determination system. In the middle of the paragraph, it states “Position determination system 134 determines location in terms of parameters such as latitude, longitude, height, speed of travel, and any other useful location or position parameters. In one embodiment, the position determination system 134 is implemented using a GPS (global positing system) or differential GPS. Paragraph 0084 of the Chern reference discusses additional details of the GPS embodiment, where there is a GPS receiver 304 and an antenna 310 which allows the GPS receiver 304 to communicate with the constellation of GPS satellites. Finally, paragraph 0085 of the Chern reference discusses voice synthesis and/or recognition capabilities. Thus, the Appellants submit that position data, which can be received from a GPS system and includes latitude, longitude, etc., is taught by the Chern reference; however, the Appellants submit that the Chern reference does not teach a “position detection system further provid[ing] orientation data to assist with user-generated queries,” as is claimed in Claim 2.

20 Thus the Appellants submit that the Examiner erred in concluding that a GPS system is capable of providing both orientation data and position data. The Examiner’s conclusion is not supported by the specification and is not consistent with the conclusion which would be reached by one skilled in the art. Therefore, the Appellants submit that the Chern reference does not teach, disclose or suggest all of the elements claimed in Claim 2. Therefore, Claim 2 is patentable over the references cited by the Examiner.

Claim 3

30 Claim 3, dependent on Claim 2, is patentable by virtue of its dependency.

Claim 4

Claim 4, dependent on Claim 2, is patentable by virtue of its dependency.

The Appellants further submit that Claim 4 is also patentable on its own merits. In order to establish a prima facie case of anticipation, the Examiner must set forth an argument that provides (1) a single reference (2) that teaches or enables (3) each of the
5 claimed elements (as arranged in the claim) (4) either expressly or inherently and (5) as interpreted by one of ordinary skill in the art. All of these factors must be present, or a case of anticipation is not met. Thus, “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). The
10 Appellants submit that the Chern reference does not teach, disclose, or suggest “said location-specific information is spatially enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated” as is claimed in Claim 4.

Claim 4 claims, in part, “wherein said location-specific information is spatially
15 enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated.”

In the Advisory Action, the Examiner stated that the Chern reference teaches “location based driving direction information” (location-specific information) is related to a user position and orientation data, “i.e., a map” is provided by a remote server 136
20 (location or object) which may be displayed on the user’s handset (paragraph 0063 through paragraph 0065). The Appellants assert that this teaching by the Chern reference is not teaching “location-specific information is spatially enhanced based on the users position and orientation data to appear to be coming from a location or object with which the information is associated.”

25 As previously stated with regard to Claim 2, the Appellants assert that the Chern reference does not teach, disclose, or suggest “orientation data;” therefore, the Chern reference cannot teach, disclose or suggest “location-specific information is spatially enhanced based on the user position and orientation data,” as is claimed in Claim 4. (emphasis added)

30 Further, the paragraphs cited by the Examiner do not teach, disclose or suggest the elements in Claim 4. Paragraph 0063 of the Chern reference discloses providing

location-based driving directions in which city-to-city or door-to-door driving directions are available. These driving directions are displayed on a handset. Paragraph 0064 of the Chern reference discloses that the user must enter the destination address, but the starting address can be either entered or determined by the user's position. Again, the Appellants
5 assert that position data is being used here and not orientation data. Finally, paragraph 0065 of the Chern reference teaches that the directions may be displayed visually or audibly rendered. Although the Chern reference teaches that that directions may be audibly rendered, there is no teaching, disclosure, or suggestion that the information is
10 "spatially enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated." Therefore, the Appellants submit that the Chern reference does not teach, disclose or suggest all the limitations of Claim 4. Therefore, Claim 4 is patentable over the reference cited by the Examiner.

15 Claim 5

Claim 5, dependent on Claim 2, is patentable by virtue of its dependency.

Claim 8

Claim 8, dependent on Claim 2, is patentable by virtue of its dependency.

20 Claim 11

Claim 11, dependent on Claim 2, is patentable by virtue of its dependency.

Claim 12

25 Claim 12, dependent on Claim 11, is patentable by virtue of its dependency.

Claim 13

Claim 13, dependent on Claim 2, is patentable by virtue of its dependency.

The Appellants further submit that Claim 13 is patentable on its own merits. In
30 the Advisory Action, the Examiner stated "[r]egarding claim 13, applicant alleges that [Chern] reference does not disclose an audio transmission device configured to provide

“location-specific information” based on an expected user destination determined from the user orientation data. Examiner agrees with applicant. However, claim 13 does not recite an audio transmission device configured to provide “location-specific information” based on an expected user destination determined from the user orientation data.” The

5 Appellants disagree with the conclusion about Claim 13 drawn by the Examiner.

Claim 13, claims, “The audio information transmission device of claim 2 configured to provide location-specific information based on an expected user destination determined from the user orientation data.” The Appellants do not understand the Examiner’s position that Claim 13 does not claim, what Claim 13 clearly recites. While

10 the Examiner stated in his Advisory Action that the Chern reference does not teach this element, the Appellants repeat their arguments regarding why the Chern reference does not teach, disclose or suggest the limitations in Claim 13 for clarity and for the record.

As previously presented with reference to Claim 2, the Appellants submit that the Chern reference does not teach, disclose or suggest orientation data, thus the Appellants

15 submit that the Chern reference does not teach, disclose or suggest providing location-specific information based on an expected user destination determined from the user orientation data as is claimed in Claim 13.

In addition, the Appellants submit that the Chern reference does not teach, disclose or suggest an audio transmission device configured to “provide location-specific

20 information based on an expected user destination determined from the user orientation data,” as is claimed in Claim 13. As previously presented, paragraphs 0063 through 0065 of the Chern reference describe providing location-based driving directions in response to a user request. These paragraphs describe door-to-door driving directions as well as city-to-city driving directions as being available. Additionally, these paragraphs disclose how

25 the starting location and ending location are determined. The starting location is either determined by the position determination mechanism, i.e., GPS system, or by the user entering the information. The Chern reference teaches, at step 640, that the user enters the destination city, in the case of city-to-city directions, or at step 644, the user enters the destination address if it is door-to-door driving directions that are requested. Thus, the

30 Chern reference teaches that the user destination is determined from user input. In contrast, Claim 13 claims, “user destination determined from the user orientation data.”

Thus, the Appellants submit that the Chern reference does not teach, disclose or suggest all of the limitations of Claim 13. Therefore, the Appellants submit that Claim 13 is patentable over the cited prior art in addition to being patentable based upon an allowable base claim.

5

Issue 2 – Are Claims 15-17, 20, and 23-25 anticipated under 35 USC 102(e) by the Chern reference?

In sections 2 and 3 of the Office Action of August 9, 2004, the Examiner rejected Claims 15-17, 20, and 23-25 under 35 USC §102(e) as being anticipated by U.S. Patent Publication No. 2003/0060211 to Chern et al. The Appellants submit that the Chern reference does not describe each and every element as set forth in the rejected claims.

The Appellants submit that for many of the claims rejected under 35 USC 102(e), the Examiner reached an improper conclusion as to the teachings of the Chern reference and incorrectly interpreted the limitations of the rejected claims. As stated in MPEP 2111, the claims must be “given *<their> broadest reasonable interpretation consistent with the specification,” citing to *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000). However, the “broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach.” MPEP 2111 quoting *In re Cortright*, 165 F.2d 1353, 1359 (Fed. Cir. 1999). As discussed below, the Appellants submit that the Examiner had not given the rejected claims the broadest reasonable interpretation consistent with either the specification or with the interpretation that those skilled in the art would reach. Therefore, when the rejected claims are given their broadest reasonable interpretation, the Appellants assert that the Chern reference does not describes each and every element as set forth in the rejected claims.

25

Claim 15

Regarding Claim 15, the Examiner asserted, in the Final Office Action, that the Chern reference discloses orientation data to assist with user-generated queries, pointing to paragraphs 0040, 0084, and 0085. In the Final Office Action, the Examiner repeated his belief that the Chern reference teaches a GPS system that provides orientation data. The Examiner further indicated that he has addressed the limitations that are in the claims

30

that are the broadest reasonable interpretation consistent with the specification. The Appellants disagree with the characterization of the Chern reference by the Examiner, and submit that the Examiner's interpretation of the claims is neither consistent with the specification, nor with the conclusion which would be reached by one skilled in the art.

5 In order to establish a prima facie case of anticipation, the Examiner must set forth an argument that provides (1) a single reference (2) that teaches or enables (3) each of the claimed elements (as arranged in the claim) (4) either expressly or inherently and (5) as interpreted by one of ordinary skill in the art. All of these factors must be present, or a case of anticipation is not met. Thus, "[a]nticipation requires the disclosure in a
10 single prior art reference of each element of the claim under consideration." *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). The Appellants submit that the Chern reference does not teach, disclose, or suggest "orientation data" as is claimed in Claim 15.

15 Claim 15 claims, in part, "... utilizing a position detection system comprised of a variety of position devices to generate a user position ... wherein the position detection system further collects user orientation data ." (emphasis added) Thus, Claim 15 claims both user position data and orientation data.

In the Final Office Action and in the Advisory Action, the Examiner again asserted that he interpreted the position data of a GPS system disclosed by Chern to teach
20 the position data and orientation data claimed in Claim 15.

First, the Appellants submit that if position data were the same thing as orientation data then the Appellants would not have included both terms in the claims and in the specification. Further, the Appellants supplied different definitions in the specification for each term. The paragraph spanning pages 7 and 8 of the application and
25 in the first full paragraph on page 8 provide examples of what is meant by "position data" and "orientation data." The paragraph spanning pages 7 and 8 of the application provides an interpretation of "position data," stating "the system requires either that the user's position be manually entered by the user, or that the system to receive the user's position form an automatic position-sensing device 202 such as a global positioning system
30 (GPS)." The first full paragraph on page 8 provides an interpretation of "orientation data," stating "[a]dditional embodiments of the present invention allow explicit querying

of the information server 100 based on the position and orientation of the user. Such querying can be achieved with the aid of a body-worn device such as a compass that transmits the orientation of the user to the information server 100.” Thus, the Appellants submit that position data is not the same thing as orientation data.

5 Second, the Appellants submit that the Examiner’s assertion that GPS systems provide orientation data is not a conclusion that would be reached by one skilled in the art. One skilled in the art would understand that GPS systems do not provide orientation data. Appendix B includes a definition of a GPS system from Encyclopedia Britannica Online® where GPS is defined to be a system where one can quickly and accurately
10 determine latitude, longitude, and in most cases altitude of a point on or above the Earth’s surface. The Appellants submit that one skilled in the art would appreciate that a GPS system provides position data. The Appellants provide Appendix C with the Merriam-Webster’s Online Dictionary ® definition of position, the relevant definition being 3a: the point or area occupied by a physical object. Thus, the GPS system provides position
15 data.

 In contrast, the term “orientation” is defined as the act or process of orienting or being oriented; or the state of being oriented, as shown in Appendix D which is the definition of orientation from Merriam-Webster’s Online Dictionary ®. Appendix E shows the relevant definition of orient as 1b: to set or arrange in any determinate position
20 especially in relation to the points of the compass. There is no mechanism of the GPS satellites to provide orientation data. The GPS system can provide information on where a person is on a map, but not the orientation (direction) the person is facing. Thus, the Appellants submit that the Chern reference, in teaching a GPS system, does not teach, disclose or suggest “orientation data” as is claimed in Claim 15.

25 In light of the foregoing, the Appellants submit that consistent with the specification, position data is not the same thing as orientation data, position data being something that can be obtained from GPS and orientation being something that requires directional information from a device such as a compass.

 The Appellants submit that while the Chern reference does teach providing
30 position data, the Chern reference does not teach, disclose or suggest orientation data, as is claimed in Claim 15. In the Chern reference, paragraph 0040 refers to a position

determination system. In the middle of the paragraph, it states “Position determination system 134 determines location in terms of parameters such as latitude, longitude, height, speed of travel, and any other useful location or position parameters. In one embodiment, the position determination system 134 is implemented using a GPS (global positioning system) or differential GPS. Paragraph 0084 of the Chern reference discusses additional details of the GPS embodiment, where there is a GPS receiver 304 and an antenna 310 which allows the GPS receiver 304 to communicate with the constellation of GPS satellites. Finally, paragraph 0085 of the Chern reference discusses voice synthesis and/or recognition capabilities. Thus, the Appellants submit that position data, which can be received from a GPS system and includes latitude, longitude, etc., is taught by the Chern reference; however, the Appellants submit that the Chern reference does not teach a “position detection system further provid[ing] orientation data to assist with user-generated queries,” as is claimed in Claim 15.

Thus the Appellants submit that the Examiner erred in concluding that a GPS system is capable of providing both orientation data and position data. The Examiner’s conclusion is not supported by the specification and is not consistent with the conclusion which would be reached by one skilled in the art. Therefore, the Appellants submit that the Chern reference does not teach, disclose or suggest all of the elements claimed in Claim 15. Therefore, Claim 15 is patentable over the references cited by the Examiner.

Claim 16

Claim 16, dependent upon Claim 15, is patentable by virtue of its dependency.

The Appellants further submit that Claim 16 is also patentable on its own merits. In order to establish a prima facie case of anticipation, the Examiner must set forth an argument that provides (1) a single reference (2) that teaches or enables (3) each of the claimed elements (as arranged in the claim) (4) either expressly or inherently and (5) as interpreted by one of ordinary skill in the art. All of these factors must be present, or a case of anticipation is not met. Thus, “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). The Appellants submit that the Chern reference does not teach, disclose, or suggest “said

location-specific information is spatially enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated” as is claimed in Claim 16.

5 Claim 16 claims, in part, “wherein said location-specific information is spatially enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated.”

10 In the Advisory Action, the Examiner stated that the Chern reference teaches “location based driving direction information” (location-specific information) is related to a user position and orientation data, “i.e., a map” is provided by a remote server 136 (location or object) which may be displayed on the user’s handset (paragraph 0063 through paragraph 0065). The Appellants assert that this teaching by the Chern reference is not teaching “location-specific information is spatially enhanced based on the users position and orientation data to appear to be coming from a location or object with which the information is associated.”

15 As previously stated with regards to Claim 15, the Appellants assert that the Chern reference does not teach, disclose, or suggest “orientation data;” therefore, the Chern reference cannot teach, disclose or suggest “location-specific information is spatially enhanced based on the user position and orientation data,” as is claimed in Claim 16. (emphasis added)

20 Further, the paragraphs cited by the Examiner do not teach, disclose or suggest the elements in Claim 16. Paragraph 0063 of the Chern reference discloses providing location-based driving directions in which city-to-city or door-to-door driving directions are available. These driving directions are displayed on a handset. Paragraph 0064 of the Chern reference discloses that the user must enter the destination address, but the starting
25 address can be either entered or determined by the user’s position. Again, the Appellants assert that position data is being used here and not orientation data. Finally, paragraph 0065 of the Chern reference teaches that the directions may be displayed visually or audibly rendered. Although the Chern reference teaches that that directions may be audibly rendered, there is no teaching, disclosure, or suggestion that the information is
30 “spatially enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated.” Therefore,

the Appellants submit that the Chern reference does not teach, disclose or suggest all the limitations of Claim 16. Therefore, Claim 16 is patentable over the reference cited by the Examiner.

5 Claim 17

Claim 17, dependent upon Claim 15, is patentable by virtue of its dependency.

Claim 18

Claim 18, dependent upon Claim 17, is patentable by virtue of its dependency.

10

Claim 20

Claim 20, dependent upon Claim 15, is patentable by virtue of its dependency.

Claim 23

15 Claim 23, dependent upon Claim 15, is patentable by virtue of its dependency.

Claim 24

Claim 24, dependent upon Claim 15, is patentable by virtue of its dependency.

20 The Appellants further submit that Claim 24 is patentable on its own merits. In the Office Action, dated August 9, 2004, the Examiner rejected Claim 24 for the same reasons he rejected Claim 13. In the Advisory Action, the Examiner stated “[r]egarding claim 13, applicant alleges that [Chern] reference does not disclose an audio transmission device configured to provide “location-specific information” based on an expected user destination determined from the user orientation data. Examiner agrees with applicant.

25 However, claim 13 does not recite an audio transmission device configured to provide “location-specific information” based on an expected user destination determined from the user orientation data.” The Appellants disagree with the conclusion about Claim 13 (and thus 24) drawn by the Examiner.

30 Claim 24, claims, “The method of providing audio information of claim 15 configured to provide location-specific information based on an expected user destination determined from the user orientation data.” As indicated above, the Appellants do not

understand the Examiner's rejection of Claim 13, thus Claim 24. While the Examiner stated in his Advisory Action that the Chern reference does not teach this element, the Appellants repeat their arguments regarding why the Chern reference does not teach, disclose or suggest the limitations in Claim 24 for clarity and for the record.

5 As previously presented with reference to Claim 15, the Appellants submit that the Chern reference does not teach, disclose or suggest orientation data, thus the Appellants submit that the Chern reference does not teach, disclose or suggest providing location-specific information based on an expected user destination determined from the user orientation data as is claimed in Claim 24.

10 In addition, the Appellants submit that the Chern reference does not teach, disclose or suggest an audio transmission device configured to "provide location-specific information based on an expected user destination determined from the user orientation data," as is claimed in Claim 24. As previously presented, paragraphs 0063 through 0065 of the Chern reference describe providing location-based driving directions in response to
15 a user request. These paragraphs describe door-to-door driving directions as well as city-to-city driving directions as being available. Additionally, these paragraphs disclose how the starting location and ending location are determined. The starting location is either determined by the position determination mechanism, i.e., GPS system, or by the user entering the information. The Chern reference teaches, at step 640, that the user enters
20 the destination city, in the case of city-to-city directions, or at step 644, the user enters the destination address if it is door-to-door driving directions that are requested. Thus, the Chern reference teaches that the user destination is determined from user input. In contrast, Claim 24 claims, "user destination determined from the user orientation data." Thus, the Appellants submit that the Chern reference does not teach, disclose or suggest
25 all of the limitations of Claim 24. Therefore, the Appellants submit that Claim 24 is patentable over the cited prior art in addition to being patentable based upon an allowable base claim.

Claim 25

30 Claim 25, dependent upon Claim 15, is patentable by virtue of its dependency.

Issue 3– Are Claims 28-31 and 33 anticipated under 35 USC 102(e) by the Chern reference?

In sections 2 and 3 of the Office Action of August 9, 2004, the Examiner rejected Claims 28-31 and 33 under 35 USC §102(e) as being anticipated by U.S. Patent
5 Publication No. 2003/0060211 to Chern et al. The Appellants submit that the Chern reference does not describe each and every element as set forth in the rejected claims.

The Appellants submit that for many of the claims rejected under 35 USC 102(e), the Examiner reached an improper conclusion as to the teachings of the Chern reference and incorrectly interpreted the limitations of the rejected claims. As stated in MPEP
10 2111, the claims must be “given *<their> broadest reasonable interpretation consistent with the specification,” citing to *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000). However, the “broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach.” MPEP 2111 quoting *In re Cortright*, 165 F.2d 1353, 1359 (Fed. Cir. 1999). As discussed below, the Appellants
15 submit that the Examiner had not given the rejected claims the broadest reasonable interpretation consistent with either the specification or with the interpretation that those skilled in the art would reach. Therefore, when the rejected claims are given their broadest reasonable interpretation, the Appellants assert that the Chern reference does not describes each and every element as set forth in the rejected claims.

20
Claim 28

Regarding Claim 28, the Examiner asserted, in the Final Office Action, that that the Chern reference discloses orientation data to assist with user-generated queries, pointing to paragraphs 0040, 0084, and 0085. In the Final Office Action, the Examiner
25 repeated his belief that the Chern reference teaches a GPS system that provides orientation data. The Examiner further indicated that he has addressed the limitations that are in the claims that are the broadest reasonable interpretation consistent with the specification. The Appellants disagree with the characterization of the Chern reference by the Examiner, and submit that the Examiner’s interpretation of the claims is neither
30 consistent with the specification, nor with the conclusion which would be reached by one skilled in the art.

In order to establish a prima facie case of anticipation, the Examiner must set forth an argument that provides (1) a single reference (2) that teaches or enables (3) each of the claimed elements (as arranged in the claim) (4) either expressly or inherently and (5) as interpreted by one of ordinary skill in the art. All of these factors must be present, or a case of anticipation is not met. Thus, “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). The Appellants submit that the Chern reference does not teach, disclose, or suggest “orientation data” as is claimed in Claim 28.

Claim 28 claims, in part, “... a position detection system capable of providing the user-specified-specific-geographic location ... wherein the position detection system further provides orientation data to assist with user-generated queries.” (emphasis added) Thus, Claim 28 claims both user geographic location and orientation data.

In the Final Office Action and in the Advisory Action, the Examiner again asserted that he interpreted the position data of a GPS system disclosed by Chern to teach the geographic location and orientation data claimed in Claim 28.

First, the Appellants submit that if geographic location were the same thing as orientation data then the Appellants would not have included both terms in the claims and in the specification. Further, the Appellants supplied different definitions in the specification for each term. The paragraph spanning pages 7 and 8 of the application and in the first full paragraph on page 8 provide examples of what is meant by “geographic location” and “orientation data.” The paragraph spanning pages 7 and 8 of the application provides an interpretation of “geographic location,” stating “the system requires either that the user’s position be manually entered by the user, or that the system to receive the user’s position form an automatic position-sensing device 202 such as a global positioning system (GPS).” The first full paragraph on page 8 provides an interpretation of “orientation data,” stating “[a]dditional embodiments of the present invention allow explicit querying of the information server 100 based on the position and orientation of the user. Such querying can be achieved with the aid of a body-worn device such as a compass that transmits the orientation of the user to the information

server 100.” Thus, the Appellants submit that geographic location is not the same thing as orientation data.

Second, the Appellants submit that the Examiner’s assertion that GPS systems provide orientation data is not a conclusion that would be reached by one skilled in the art. One skilled in the art would understand that GPS systems do not provide orientation data. Appendix B includes a definition of a GPS system from Encyclopedia Britannica Online® where GPS is defined to be a system where one can quickly and accurately determine latitude, longitude, and in most cases altitude of a point on or above the Earth’s surface. The Appellants submit that one skilled in the art would appreciate that a GPS system provides geographic location. The Appellants provide Appendix C with the Merriam-Webster’s Online Dictionary ® definition of position, the relevant definition being 3a: the point or area occupied by a physical object. Thus, the GPS system provides position data or geographic location.

In contrast, the term “orientation” is defined as the act or process of orienting or being oriented; or the state of being oriented, as shown in Appendix D which is the definition of orientation from Merriam-Webster’s Online Dictionary ®. Appendix E shows the relevant definition of orient as 1b: to set or arrange in any determinate position especially in relation to the points of the compass. There is no mechanism of the GPS satellites to provide orientation data. The GPS system can provide information on where a person is on a map, but not the orientation (direction) the person is facing. Thus, the Appellants submit that the Chern reference, in teaching a GPS system, does not teach, disclose or suggest “orientation data” as is claimed in Claim 28.

In light of the foregoing, the Appellants submit that consistent with the specification, geographic location is not the same thing as orientation data, position data being something that can be obtained from GPS and orientation being something that requires directional information from a device such as a compass.

The Appellants submit that while the Chern reference does teach providing geographic location, the Chern reference does not teach, disclose or suggest orientation data, as is claimed in Claim 28. In the Chern reference, paragraph 0040 refers to a position determination system. In the middle of the paragraph, it states “Position determination system 134 determines location in terms of parameters such as latitude,

longitude, height, speed of travel, and any other useful location or position parameters.

In one embodiment, the position determination system 134 is implemented using a GPS (global positioning system) or differential GPS. Paragraph 0084 of the Chern reference discusses additional details of the GPS embodiment, where there is a GPS receiver 304

5 and an antenna 310 which allows the GPS receiver 304 to communicate with the constellation of GPS satellites. Finally, paragraph 0085 of the Chern reference discusses voice synthesis and/or recognition capabilities. Thus, the Appellants submit that position data, which can be received from a GPS system and includes latitude, longitude, etc., is taught by the Chern reference; however, the Appellants submit that the Chern reference
10 does not teach a “position detection system further provid[ing] orientation data to assist with user-generated queries,” as is claimed in Claim 28.

Thus the Appellants submit that the Examiner erred in concluding that a GPS system is capable of providing both orientation data and position data. The Examiner’s conclusion is not supported by the specification and is not consistent with the conclusion
15 which would be reached by one skilled in the art. Therefore, the Appellants submit that the Chern reference does not teach, disclose or suggest all of the elements claimed in Claim 28. Therefore, Claim 28 is patentable over the references cited by the Examiner.

Claim 29

Claim 29, dependent on Claim 28, is patentable by virtue of its dependency.

20 The Appellants further submit that Claim 29 is patentable on its own merits. In the Advisory Action, the Examiner stated “[r]egarding claim 13, applicant alleges that [Chern] reference does not disclose an audio transmission device configured to provide “location-specific information” based on an expected user destination determined from the user orientation data. Examiner agrees with applicant. However, claim 13 does not
25 recite an audio transmission device configured to provide “location-specific information” based on an expected user destination determined from the user orientation data.” The Appellants submit that Claim 29 claims similar limitations to Claim 13. Further, the Appellants disagree with the conclusion about Claim 13, thus Claim 29, drawn by the Examiner.

30 Claim 29, claims, “An information delivery system as set forth in Claim 28, wherein the data associated with the user-specified-geographic-location provided to the

user is based on an expected user destination determined from the orientation data.” As previously stated, the Appellants do not understand the Examiner’s position that Claim 13 does not claim, what Claim 13 clearly recites. While the Examiner stated in his Advisory Action that the Chern reference does not teach this element, the Appellants repeat their arguments regarding why the Chern reference does not teach, disclose or suggest the limitations in Claim 29 for clarity and for the record.

As previously presented with reference to Claim 28, the Appellants submit that the Chern reference does not teach, disclose or suggest orientation data, thus the Appellants submit that the Chern reference does not teach, disclose or suggest providing location-specific information based on an expected user destination determined from the user orientation data as is claimed in Claim 29.

In addition, the Appellants submit that the Chern reference does not teach, disclose or suggest an information delivery system “wherein the data associated with the user-specified-geographic location provided to the user is based on an expected user destination determined from the user orientation data,” as is claimed in Claim 29. As previously presented, paragraphs 0063 through 0065 of the Chern reference describe providing location-based driving directions in response to a user request. These paragraphs describe door-to-door driving directions as well as city-to-city driving directions as being available. Additionally, these paragraphs disclose how the starting location and ending location are determined. The starting location is either determined by the position determination mechanism, i.e., GPS system, or by the user entering the information. The Chern reference teaches, at step 640, that the user enters the destination city, in the case of city-to-city directions, or at step 644, the user enters the destination address if it is door-to-door driving directions that are requested. Thus, the Chern reference teaches that the user destination is determined from user input. In contrast, Claim 29 claims, “user destination determined from the user orientation data.” Thus, the Appellants submit that the Chern reference does not teach, disclose or suggest all of the limitations of Claim 29. Therefore, the Appellants submit that Claim 29 is patentable over the cited prior art in addition to being patentable based upon an allowable base claim.

Claim 30

Claim 30, dependent on Claim 28, is patentable by virtue of its dependency.

The Appellants further submit that Claim 30 is also patentable on its own merits. In order to establish a prima facie case of anticipation, the Examiner must set forth an argument that provides (1) a single reference (2) that teaches or enables (3) each of the
5 claimed elements (as arranged in the claim) (4) either expressly or inherently and (5) as interpreted by one of ordinary skill in the art. All of these factors must be present, or a case of anticipation is not met. Thus, “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). The
10 Appellants submit that the Chern reference does not teach, disclose, or suggest “the data associated with the user-specific-geographic location is spatially enhanced based on the user’s position and orientation to appear to be coming from a location or object with which the information is associated” as is claimed in Claim 30.

Claim 30 claims, in part, “wherein the data associated with the user-specified-
15 specific-geographic location is spatially enhanced based on the user’s position and orientation to appear to be coming from a location or object with which the information is associated.”

In the Advisory Action, the Examiner stated that the Chern reference teaches “location based driving direction information” (location-specific information) is related
20 to a user position and orientation data, “i.e., a map” is provided by a remote server 136 (location or object) which may be displayed on the user’s handset (paragraph 0063 through paragraph 0065). The Appellants assert that this teaching by the Chern reference is not teaching “the user-specified-specific-geographic location is spatially enhanced based on the user’s position and orientation to appear to be coming from a location or
25 object with which the information is associated.”

As previously stated with regards to Claim 28, the Appellants assert that the Chern reference does not teach, disclose, or suggest “orientation data;” therefore, the Chern reference cannot teach, disclose or suggest “location-specific information is spatially enhanced based on the user position and orientation data,” as is claimed in
30 Claim 30. (emphasis added)

Further, the paragraphs cited by the Examiner do not teach, disclose or suggest the elements in Claim 30. Paragraph 0063 of the Chern reference discloses providing location-based driving directions in which city-to-city or door-to-door driving directions are available. These driving directions are displayed on a handset. Paragraph 0064 of the Chern reference discloses that the user must enter the destination address, but the starting address can be either entered or determined by the user's position. Again, the Appellants assert that position data is being used here and not orientation data. Finally, paragraph 0065 of the Chern reference teaches that the directions may be displayed visually or audibly rendered. Although the Chern reference teaches that that directions may be audibly rendered, there is no teaching, disclosure, or suggestion that the information is "spatially enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated." Therefore, the Appellants submit that the Chern reference does not teach, disclose or suggest all the limitations of Claim 30. Therefore, Claim 30 is patentable over the reference cited by the Examiner.

Claim 31

Claim 31, dependent upon Claim 28, is patentable by virtue of its dependency.

Claim 33

Claim 33, dependent upon Claim 28, is patentable by virtue of its dependency.

Issue 4 – Are Claims 37-39 anticipated under 35 USC 102(e) by the Chern reference?

In sections 2 and 3 of the Office Action of August 9, 2004, the Examiner rejected Claims 37-39 under 35 USC §102(e) as being anticipated by U.S. Patent Publication No. 2003/0060211 to Chern et al. The Appellants submit that the Chern reference does not describe each and every element as set forth in the rejected claims.

The Appellants submit that for many of the claims rejected under 35 USC 102(e), the Examiner reached an improper conclusion as to the teachings of the Chern reference and incorrectly interpreted the limitations of the rejected claims. As stated in MPEP 2111, the claims must be "given *<their> broadest reasonable interpretation consistent with the specification," citing to *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000).

However, the “broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach.” MPEP 2111 quoting *In re Cortright*, 165 F.2d 1353, 1359 (Fed. Cir. 1999). As discussed below, the Appellants submit that the Examiner had not given the rejected claims the broadest reasonable interpretation consistent with either the specification or with the interpretation that those skilled in the art would reach. Therefore, when the rejected claims are given their broadest reasonable interpretation, the Appellants assert that the Chern reference does not describes each and every element as set forth in the rejected claims.

10 Claim 37

Regarding Claim 37, the Examiner asserted, in the Final Office Action, that that the Chern reference discloses that the position diction system further provides orientation data, pointing to paragraphs 0050-0053. These paragraphs describe how the handheld device and the server communicate to provide information about nearby restaurants, etc. to the users. The Appellants assert, as stated above, that the Chern reference does not teach, disclose or suggest orientation data. In the Final Office Action, the Examiner repeated his belief that the Chern reference teaches a GPS system that provides orientation data. The Examiner further indicated that he has addressed the limitations that are in the claims that are the broadest reasonable interpretation consistent with the specification. The Appellants disagree with the characterization of the Chern reference by the Examiner, and submit that the Examiner’s interpretation of the claims is neither consistent with the specification, nor with the conclusion which would be reached by one skilled in the art.

In order to establish a prima facie case of anticipation, the Examiner must set forth an argument that provides (1) a single reference (2) that teaches or enables (3) each of the claimed elements (as arranged in the claim) (4) either expressly or inherently and (5) as interpreted by one of ordinary skill in the art. All of these factors must be present, or a case of anticipation is not met. Thus, “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). The

Appellants submit that the Chern reference does not teach, disclose, or suggest
“orientation data” as is claimed in Claim 37.

Claim 37 claims, in part, “... choosing a user-specific-geographic location by
utilizing a position detection system, wherein the user-specified-specific-geographic
5 location is a user’s position ... wherein the position detection system further provides
user orientation data.” (emphasis added) Thus, Claim 37 claims both user position data
and orientation data.

In the Final Office Action and in the Advisory Action, the Examiner again
asserted that he interpreted the position data of a GPS system disclosed by Chern to teach
10 the position data and orientation data claimed in Claim 37.

First, the Appellants submit that if position data were the same thing as
orientation data then the Appellants would not have included both terms in the claims and
in the specification. Further, the Appellants supplied different definitions in the
specification for each term. The paragraph spanning pages 7 and 8 of the application and
15 in the first full paragraph on page 8 provide examples of what is meant by “position data”
and “orientation data.” The paragraph spanning pages 7 and 8 of the application provides
an interpretation of “position data,” stating “the system requires either that the user’s
position be manually entered by the user, or that the system to receive the user’s position
form an automatic position-sensing device 202 such as a global positioning system
20 (GPS).” The first full paragraph on page 8 provides an interpretation of “orientation
data,” stating “[a]dditional embodiments of the present invention allow explicit querying
of the information server 100 based on the position and orientation of the user. Such
querying can be achieved with the aid of a body-worn device such as a compass that
transmits the orientation of the user to the information server 100.” Thus, the Appellants
25 submit that position data is not the same thing as orientation data.

Second, the Appellants submit that the Examiner’s assertion that GPS systems
provide orientation data is not a conclusion that would be reached by one skilled in the
art. One skilled in the art would understand that GPS systems do not provide orientation
data. Appendix B includes a definition of a GPS system from Encyclopedia Britannica
30 Online® where GPS is defined to be a system where one can quickly and accurately
determine latitude, longitude, and in most cases altitude of a point on or above the Earth’s

surface. The Appellants submit that one skilled in the art would appreciate that a GPS system provides position data. The Appellants provide Appendix C with the Merriam-Webster's Online Dictionary ® definition of position, the relevant definition being 3a: the point or area occupied by a physical object. Thus, the GPS system provides position data.

In contrast, the term "orientation" is defined as the act or process of orienting or being oriented; or the state of being oriented, as shown in Appendix D which is the definition of orientation from Merriam-Webster's Online Dictionary ®. Appendix E shows the relevant definition of orient as 1b: to set or arrange in any determinate position especially in relation to the points of the compass. There is no mechanism of the GPS satellites to provide orientation data. The GPS system can provide information on where a person is on a map, but not the orientation (direction) the person is facing. Thus, the Appellants submit that the Chern reference, in teaching a GPS system, does not teach, disclose or suggest "orientation data" as is claimed in Claim 37.

In light of the foregoing, the Appellants submit that consistent with the specification, position data is not the same thing as orientation data, position data being something that can be obtained from GPS and orientation being something that requires directional information from a device such as a compass.

The Appellants submit that while the Chern reference does teach providing position data, the Chern reference does not teach, disclose or suggest orientation data, as is claimed in Claim 37. In the Chern reference, paragraph 0040 refers to a position determination system. In the middle of the paragraph, it states "Position determination system 134 determines location in terms of parameters such as latitude, longitude, height, speed of travel, and any other useful location or position parameters. In one embodiment, the position determination system 134 is implemented using a GPS (global positing system) or differential GPS. Paragraph 0084 of the Chern reference discusses additional details of the GPS embodiment, where there is a GPS receiver 304 and an antenna 310 which allows the GPS receiver 304 to communicate with the constellation of GPS satellites. Finally, paragraph 0085 of the Chern reference discusses voice synthesis and/or recognition capabilities. Thus, the Appellants submit that position data, which can be received from a GPS system and includes latitude, longitude, etc., is taught by the

Chern reference; however, the Appellants submit that the Chern reference does not teach a “position detection system further provid[ing] orientation data to assist with user-generated queries,” as is claimed in Claim 37.

Thus the Appellants submit that the Examiner erred in concluding that a GPS system is capable of providing both orientation data and position data. The Examiner’s conclusion is not supported by the specification and is not consistent with the conclusion which would be reached by one skilled in the art. Therefore, the Appellants submit that the Chern reference does not teach, disclose or suggest all of the elements claimed in Claim 37. Therefore, Claim 37 is patentable over the references cited by the Examiner.

Claim 38

Claim 38, dependent on Claim 37, is patentable by virtue of its dependency.

The Appellants further submit that Claim 38 is also patentable on its own merits. In order to establish a prima facie case of anticipation, the Examiner must set forth an argument that provides (1) a single reference (2) that teaches or enables (3) each of the claimed elements (as arranged in the claim) (4) either expressly or inherently and (5) as interpreted by one of ordinary skill in the art. All of these factors must be present, or a case of anticipation is not met. Thus, “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). The Appellants submit that the Chern reference does not teach, disclose, or suggest “the act of returning the data further comprises an act of spatially enhancing the data based on the user’s position and orientation data to appear to be coming form a location with which the data is associated” as is claimed in Claim 38.

Claim 38 claims, in part, “the act of returning the data further comprises an act of spatially enhancing the data based on the user’s position and orientation data to appear to be coming form a location with which the data is associated.”

In the Advisory Action, the Examiner stated that the Chern reference teaches “location based driving direction information” (location-specific information) is related to a user position and orientation data, “i.e., a map” is provided by a remote server (location or object) which may be displayed on the user’s handset (paragraph 0063 through paragraph 0065). The Appellants assert that this teaching by the Chern reference

is not teaching “location-specific information is spatially enhanced based on the user’s position and orientation data to appear to be coming from a location or object with which the information is associated.”

5 As previously stated with regards to Claim 37, the Appellants assert that the Chern reference does not teach, disclose, or suggest “orientation data;” therefore, the Chern reference cannot teach, disclose or suggest “location-specific information is spatially enhanced based on the user position and orientation data,” as is claimed in Claim 38. (emphasis added)

10 Further, the paragraphs cited by the Examiner do not teach, disclose or suggest the elements in Claim 38. Paragraph 0063 of the Chern reference discloses providing location-based driving directions in which city-to-city or door-to-door driving directions are available. These driving directions are displayed on a handset. Paragraph 0064 of the Chern reference discloses that the user must enter the destination address, but the starting address can be either entered or determined by the user’s position. Again, the Appellants
15 assert that position data is being used here and not orientation data. Finally, paragraph 0065 of the Chern reference teaches that the directions may be displayed visually or audibly rendered. Although the Chern reference teaches that that directions may be audibly rendered, there is no teaching, disclosure, or suggestion that the information is
20 “spatially enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated.” Therefore, the Appellants submit that the Chern reference does not teach, disclose or suggest all the limitations of Claim 38. Therefore, Claim 38 is patentable over the reference cited by the Examiner.

Claim 39

25 Claim 39, dependent on Claim 37, is patentable by virtue of its dependency.

Issue 5 – Are Claims 6, 7, 18, 19, 32, and 40 obvious under 35 USC 103(a) over the Chern reference in view of U.S. Patent No. 5,870,454 to Dahlén?

Claim 6

Claim 6, dependent on Claim 2, is patentable by virtue of its dependency.

Claim 7

Claim 7, dependent on Claim 2, is patentable by virtue of its dependency.

Claim 18

5 Claim 18, dependent on Claim 17, is patentable by virtue of its dependency.

Claim 19

Claim 19, dependent on Claim 15, is patentable by virtue of its dependency.

Claim 32

Claim 32, dependent on Claim 28, is patentable by virtue of its dependency.

10 Claim 40

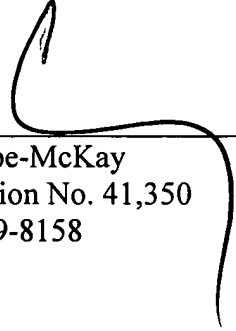
Claim 40, dependent on Claim 37, is patentable by virtue of its dependency.

CONCLUSION

For the extensive reasons advanced above, the Appellants respectfully contend that each claim is patentable. Therefore, reversal of all rejections and objections is courteously solicited.

To the extent necessary, a petition for an extension of time under 37 CFR 1.136 is hereby made. Please charge any shortage of fees due in connection with the filing of this paper, including extension of time fees, to deposit account no. 50-2691 and please credit any excess fees to such deposit account.

Respectfully submitted,
TOPE-MCKAY & ASSOCIATES

By: 
Cary Tope-McKay
Registration No. 41,350
(310) 589-8158

Encl: Appendix A – Claims Appendix
Appendix B – Evidence Appendix
Appendix B-1 – encyclopedia extract of GPS
Appendix B-2 – dictionary extract of position
Appendix B-3 – dictionary extract of orientation
Appendix B-4 – dictionary extract of orient
Appendix C – Related Proceedings Appendix



CLAIMS APPENDIX

What is claimed is:

5 1. (Cancelled)

2. An audio information transmission device comprising:

a user interface, a position detection system, an information server, and a playback manager, wherein,

10 the user interface provides a user with an ability to submit queries to a database, and further provides location-specific information back to the user;

the position detection system is comprised of a variety of complementary devices that provide user position data to assist with the user-generated queries;

15 the information server provides a means for communicating the queries and the position data to the database, and further provides a means for communicating references to the playback manager; and

the playback manager provides a means for delivering location-specific information to the user interface, wherein

20 said position detection system further provides orientation data to assist with user-generated queries.

3. The audio information transmission device of claim 2 wherein said playback manager further provides preference-filtered information to the user interface.

4. The audio information transmission device of claim 2 wherein said location-specific information is spatially enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated.

5

5. The audio information transmission device of claim 2 wherein said location-specific information is provided to the user as text.

6. The audio information transmission device of claim 2 wherein said location-specific information that is only available as text is automatically converted from text to a user-selected spoken language.

7. The audio information transmission device of claim 2 wherein said location-specific audio information is automatically translated from a spoken language to another spoken language of the user's choice.

8. The audio information transmission device of claim 2 wherein said information server is either a distributed Internet-based information server networked to a plurality of information sources or a dedicated independent server.

20

9. The audio information transmission device of claim 2 wherein said location specific information has an ability to be user-annotated or user-modified.

10. The audio information transmission device of claim 9 wherein said location-specific information has an ability to be user-annotated or user-modified provided the user has administrative authorization.

5

11. The audio information transmission device of claim 2 wherein said user interface a two-way communications device.

12. The audio information transmission device of claim 11, wherein said two-way

10 communications device is selected from the group consisting of a wireless phone, a mobile phone, a traditional phone, a fixed or mobile transceiver, and a computer.

13. The audio information transmission device of claim 2 configured to provide location-specific information based on an expected user destination determined from the user orientation data.

15

14. (Cancelled)

15. A method of providing audio information comprising acts of:

20 providing a user interface whereby a user submits queries to a database;

utilizing a position detection system comprised of a variety of position devices to generate a user position;

communicating the queries and the position data through an information server to the database;

communicating location-specific information through the information server to a playback manager;

- 5 utilizing the playback manger to send the information to the user interface; and
utilizing the user-interface to communicate the information to the user, wherein the position detection system further collects user orientation data.

16. The method of providing audio information of claim 15 wherein said location-
10 specific information is spatially-enhanced based on the user position and orientation data to appear to be coming from an area or object with which the information is associated.

17. The method of providing audio information of claim 15 wherein said location-
15 specific information is available as text.

18. The method of providing audio information of claim 17 wherein said location-specific information that is only available as text is automatically converted from text to a user-selected spoken language.

20

19. The method of providing audio information of claim 15 wherein said location-specific audio information is automatically translated from a spoken language foreign to the user to a language of a user's choice.

20. The method of providing audio information of claim 15-wherein said information server is either a distributed Internet-based information server networked to a plurality of information sources or a dedicated independent server.

5

21. The method of providing audio information of claim 15 wherein said location-specific information has an ability to be user-annotated or user-modified.

22. The method of providing audio information of claim 21 wherein said location-

10 specific information has an ability to be user-annotated or user-modified provided the user has administrator authorization.

23. The method of providing audio information of claim 15 wherein said user interface is a two-way communications device.

15

24. The method of providing audio information of claim 15 configured to provide location-specific information based on expected user destination inferred from the user orientation data.

20 25. The method of providing audio information of claim 15 configured to provide location-specific information based on the user's expected destination as determined from user input.

26. (Cancelled)

27. (Cancelled)

5 28. An information delivery system comprising:

a database comprised of data associated with a plurality of specific geographic locations;

a user interface allowing a user to determine a user-specified-specific-geographic location;

10 a position detection system capable of providing the user-specified-specific-geographic location; and

an information server associated with the database and the user interface, wherein the information server assists with querying the database based upon the user-specified-specific-geographic location and returns data associated with the user-specified-specific geographic location to the user through the user interface, wherein the position detection system further provides orientation data to assist with user-generated queries.

29. An information delivery system as set forth in Claim 28, wherein the data associated with the user-specified-specific-geographic location provided to the user is based upon an expected user destination determined from the orientation data.

30. An information delivery system as set forth in Claim 28, wherein the data associated with the user-specified-specific-geographic location is spatially enhanced based on

the user's position and orientation to appear to be coming from a location with which the data is associated.

31. An information delivery system as set forth in Claim 28, wherein data associated with the user-specified-specific-geographic location is provided to the user as text.

32. An information delivery system as set forth in Claim 28, wherein data associated with the user-specified-specific-geographic location that is available as text is automatically converted from text to a user-selected spoken language.

33. An information delivery system as set forth in Claim 28, wherein the database and the information server are either a distributed Internet-based information server networked to a plurality of information sources or a dedicated independent server.

34. The information delivery system as set forth in Claim 28, wherein a user may annotate or modify the data associated with the plurality of specific geographic locations in the database.

35. (Cancelled)

36. (Cancelled)

37. A method for information delivery comprising acts of:

choosing a user-specified-specific-geographic location by utilizing a position detection system, wherein the user-specified-specific-geographic location is a user's position;

querying a database based upon the user-specified-specific-geographic location; and

5 returning data associated with the user-specified-specific-geographic location to a user, wherein the position detection system further provides user orientation data.

38. A method for information delivery as set forth in Claim 37, wherein the act of

returning the data further comprises an act of spatially enhancing the data based on

10 the user's position and orientation data to appear to be coming from a location with which the data is associated.

39. A method for information delivery as set forth in Claim 37, wherein in the act of

returning the data the data is returned as text.

15

40. A method for information delivery as set forth in Claim 37, wherein the act of

returning the data includes an act of determining if the data is available as text, and if

so, converting the text to a user-selected spoken language.

20 41. A method for information delivery as set forth in Claim 37, further comprising an act

of allowing a user to modify or annotate data associated with a plurality of specific

geographic locations.

42. An audio information transmission device comprising:

a user interface, a position detection system, an information server, and a playback manager, wherein,

the user interface provides a user with an ability to submit queries to a database, and

5 further provides location-specific information back to the user;

the position detection system is comprised of a variety of complimentary devices that provide user position data to assist with the user-generated queries;

the information server provides a means for communicating the queries and the position data to the database, and further provides a means for communicating references

10 to the playback manager; and

the playback manager provides a means for delivering location-specific information to the user interface, wherein

the location-specific information has an ability to be user-annotated or user-modified.

15 43. The device of Claim 42, wherein the position detection system further provides orientation data to assist with user-generated queries.

44. The device of Claim 42, wherein said playback manager further provides preference-filtered information to the user interface.

45. The device of Claim 43, wherein said location-specific information is spatially
20 enhanced based on the user position and orientation data to appear to be coming from a location or object with which the information is associated.

46. The device of Claim 42, wherein said location-specific information is provided to the user as text.

47. The device of Claim 42, wherein said location-specific information that is only available as text is automatically converted from text to a user-selected spoken language.

48. The device of Claim 42, wherein said location-specific audio information is automatically translated from a spoken language to another spoken language of the user's choice.

49. The device of Claim 42, wherein said information server is either a distributed Internet-based information server networked to a plurality of information sources or a dedicated independent server.

50. The device of Claim 42, wherein said location-specific information has an ability to be user-annotated or user-modified provided the user has administrative authorization.

51. The device of Claim 42, wherein said user interface a two-way communications device.

52. The device of Claim 51, wherein said two-way communications device is selected from the group consisting of a wireless phone, a mobile phone, a traditional phone, a fixed or mobile transceiver, and a computer.

53. The device of Claim 43, configured to provide location-specific information based on an expected user destination determined from the user orientation data.

54. A method of providing information comprising acts of:

- 5 providing a user interface whereby a user submits queries to a database;
utilizing a position detection system comprised of a variety of position devices to generate user position;
communicating the queries and the position data through an information server to the database;
- 10 communicating location-specific information through the information server to a playback manager;
utilizing the playback manager to send the information to the user interface; and
utilizing the user-interface to communicate the information to the user,
wherein the location-specific information has an ability to be user-annotated or user-
- 15 modified.

55. The method of Claim 54, wherein the position detection system further collects user orientation data.

- 20 56. The method of Claim 55, wherein said location-specific information is spatially-enhanced based on the user position and orientation data to appear to be coming from an area or object with which the information is associated.

57. The method of Claim 54, wherein said location-specific information is available as text.

58. The method of Claim 54, wherein said location-specific information that is only
5 available as text is automatically converted from text to a user-selected spoken language.

59. The method of Claim 54, wherein said location-specific audio information is
automatically translated from a spoken language foreign to the user to a language of a
10 user's choice.

60. The method of Claim 54, wherein said information server is either a distributed
Internet-based information server networked to a plurality of information sources or a
dedicated independent server.

61. The method of Claim 54, wherein said location-specific information has an ability to
be user-annotated or user-modified provided the user has administrator authorization.

62. The method of Claim 54, wherein said user interface is a two-way communications
20 device.

63. The method of Claim 55 configured to provide location-specific information based on
expected user destination inferred from the user orientation data.

64. The method of Claim 54 configured to provide location-specific information based on the user's expected destination as determined from user input.

EVIDENCE APPENDIX

This Evidence Appendix includes the following sub-appendices, which are collectively referred to as the Evidence Appendix. The sub-appendices are print-outs of actual web pages that provide support for the definitions used within the Appeal Brief. Should the Examiner need further information, the Examiner is encouraged to contact the Applicant's representative.

Appendix B-1 – encyclopedia extract of “GPS”

Appendix B-2 – dictionary extract of “position”

Appendix B-3 – dictionary extract of “orientation”

Appendix B-4 – dictionary extract of “orient”

Appendix B-1



Home :: Browse :: Newsletters :: Store :: Subscribe

Search: 

This Article's
Table of Contents

[Expand all](#)

► Global Positioning System

[Print this Table of Contents](#)

[Shopping](#)



New! Discover America

Price: USD \$499

An engaging, remarkable journey through the 50 states.



**Britannica Almanac 2005
Softcover w/ CD-ROM**

Price: USD \$8.95

Find all the facts and figures you need in one place.



**New! Britannica 2005
Ultimate Reference Suite**

Price: USD \$69.95

Only \$49.95 after mail-in rebate!

[Visit Britannica Store](#)

Global Positioning System (GPS)

Page 1 of 1

Concise Encyclopedia Article

[PRINT PAGE](#) • [PRINT ARTICLE](#) • [E-MAIL ARTICLE](#) • [CITE ARTICLE](#)

You are viewing a brief summary article.
Members can log in to view the full article.

Precise, satellite-based navigation and location system developed for U.S. military use but available to the general public with the use of proper equipment.

GPS is a fleet of more than 24 communications satellites that transmit signals globally around the clock. With a GPS receiver one can quickly and accurately determine the latitude, longitude, and in most cases the altitude of a point on or above the Earth's surface. A single GPS receiver can find its own position in seconds from GPS satellite signals, to an accuracy of 10 meters; accuracy within one meter can be achieved with sophisticated military-specification receivers. This capability has reduced the cost of acquiring spatial data for making maps while increasing cartographic accuracy. Other applications include measuring the movement of polar ice sheets, or even finding the best auto route between given points.

Get the full article with a FREE Trial

To cite this page:

MLA style:

"Global Positioning System." *Britannica Concise Encyclopedia*. 2005. Encyclopædia Britannica Premium Service. 7 Jan. 2005 <<http://www.britannica.com/ebc/article?tocId=9365690>>.

APA style:

Global Positioning System *Britannica Concise Encyclopedia*. Retrieved January 7, 2005, from Encyclopædia Britannica Premium Service. <<http://www.britannica.com/ebc/article?tocId=9365690>>

Britannica style:

"Global Positioning System" *Britannica Concise Encyclopedia* from Encyclopædia Britannica Premium Service. <<http://www.britannica.com/ebc/article?tocId=9365690>> [Accessed January 7, 2005].

◀ [Back to top](#)

More results on "Global Positioning System" when you [join](#).

Free For Members
32547 items

► Encyclopædia
Britannica
articles

► Student
articles
► Video and
media
► Web sites
► Concise
articles

Free For Members

Subscribe to unlock this content today!

Start your FREE Trial

More from Britannica on "Global Positioning System"...

Appendix B-2



Merriam-Webster OnLine

Merriam-Webster FOR KIDS

Encyclopædia BRITANNICA

Merriam-Webster ONLINE

Merriam-Webster COLLEGIATE

Merriam-Webster UNABRIDGED

HOME

PREMIUM SERVICES ▼

M-WCollegiate.com

M-WUnabridged.com

Britannica.com

Multi-User Licenses

DOWNLOADS

WORD OF THE DAY

WORD GAMES

WORD FOR THE WISE

ONLINE STORE

HELP

Merriam-Webster Inc.
Company information

Merriam-Webster Online Dictionary

Thesaurus

9 entries found for **position**.

To select an entry, click on it.

position[1,noun]
 position[2,transitive verb]
 fetal position
 lotus position
 missionary position
 plan position indicator

Go

Main Entry: **1 po-si-tion**

Pronunciation: p&- 'zi-sh&n

Function: *noun*

Etymology: Middle English *posycion*, from Middle French *position*, from Latin *position-*, *positio*, from *ponere* to lay down, put, place, from (assumed) Old Latin *posinere*, from *po-* away (akin to Old Church Slavonic *po-*, perfective prefix, Greek *apo* away) + Latin *sinere* to leave -- more at **OF**

1 : an act of placing or arranging: as **a** : the laying down of a proposition or thesis **b** : an arranging in order

2 : a point of view adopted and held to <made my *position* on the issue clear>

3 a : the point or area occupied by a physical object <took her *position* at the head of the line> **b** : a certain arrangement of bodily parts <rose to a standing *position*>

4 : a market commitment in securities or commodities; *also* : the inventory of a market trader

5 a : relative place, situation, or standing <is now in a *position* to make decisions on his own> **b** : social or official rank or status **c** : an employment for which one has been hired : **JOB** <a *position* with a brokerage firm> **d** : a situation that confers advantage or preference

For **More Information on "position"** go to **Britannica.com**Get the **Top 10 Search Results for "position"**

Merriam-Webster Online

☒ Dictionary☐ Thesaurus

Go



position

Find

Tsunami**Disaster Relief**

Click here for a list of charitable organizations from USAID.

[Donate Now](#)**Palm & Pocket****PC**

Browse and download Merriam-Webster e-books and games for Palm and Pocket PC PDAs and Mobile Phones

[Merriam-Webster Online Store](#)

Merriam-Webster
Collegiate.com
14-day Free Trial

Appendix B-3



Merriam-Webster OnLine

Merriam-Webster FOR KIDS

Encyclopædia BRITANNICA

Merriam-Webster ONLINE

Merriam-Webster COLLEGIATE[®]

Merriam-Webster UNABRIDGED

learn

teach

pick up

discover

see

find out

determine

watch

VISUAL THESAURUS
learn | LOOK IT UP

HOME

PREMIUM SERVICES ▾

M-WCollegiate.com

M-WUnabridged.com

Britannica.com

Multi-User Licenses

DOWNLOADS ▾

WORD OF THE DAY ▾

WORD GAMES ▾

WORD FOR THE WISE ▾

ONLINE STORE ▾

HELP ▾

Merriam-Webster Inc.
Company information

Merriam-Webster Online Dictionary

One entry found for **orientation**.

Main Entry: **ori·en·ta·tion** 


Pronunciation: "Or-E-&n-'tA-sh&n, "or-, -"en-

Function: *noun*

1 a : the act or process of orienting or of being oriented **b** : the state of being oriented; *broadly* : ARRANGEMENT, ALIGNMENT

2 : a usually general or lasting direction of thought, inclination, or interest

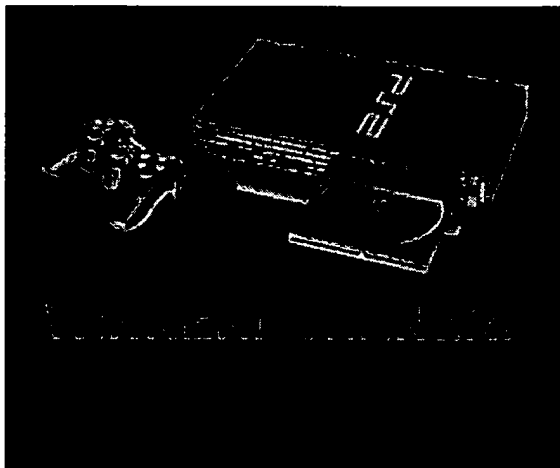
3 : change of position by organs, organelles, or organisms in response to external stimulus

- **ori·en·ta·tion·al**  /-sh&n&l, -sh&-n&l/ *adjective*

- **ori·en·ta·tion·al·ly** *adverb*

For More Information on "orientation" go to Britannica.com

Get the Top 10 Search Results for "orientation"



Pronunciation Symbols

Merriam-Webster Online

☒ Dictionary

☐ Thesaurus

Go



orientation

Find

Tsunami

Disaster Relief

Click here for a list of charitable organizations from USAID.

Donate Now

Palm & Pocket

PC

Browse and download Merriam-Webster e-books and games for Palm and Pocket PC PDAs and Mobile Phones

Merriam-Webster Online Store

Merriam-Webster
Collegiate.com

14-day Free Trial

Appendix B-4



Merriam-Webster OnLine

Merriam-Webster FOR KIDS

Encyclopædia BRITANNICA

Merriam-Webster ONLINE

Merriam-Webster COLLEGIATE[®]

Merriam-Webster UNABRIDGED

Knock Him Down!
for a **FREE iPod!**



Punch Left



Punch Right

HOME

PREMIUM SERVICES ▾

M-WCollegiate.com

M-WUnabridged.com

Britannica.com

Multi-User Licenses

DOWNLOADS ▾

WORD OF THE DAY ▾

WORD GAMES ▾

WORD FOR THE WISE ▾

ONLINE STORE ▾

HELP ▾

Merriam-Webster Inc.
Company information

Merriam-Webster Online Dictionary

4 entries found for **orient**.
To select an entry, click on it.

orient[3,transitive verb]
oriented
object-oriented
object-oriented programming

Go

Main Entry: ³**ori·ent**

Pronunciation: 'or-ē-'ent

Function: *transitive verb*

Etymology: French *orienter*, from Middle French, from *orient*

1 a : to cause to face or point toward the east; *specifically* : to build (a church or temple) with the longitudinal axis pointing eastward and the chief altar at the eastern end **b** : to set or arrange in any determinate position especially in relation to the points of the compass **c** : to ascertain the bearings of

2 a : to set right by adjusting to facts or principles **b** : to acquaint with the existing situation or environment

3 : to direct (as a book or film) toward the interests of a particular group

4 : to cause the axes of the molecules of to assume the same direction

For More Information on "orient" go to Britannica.com

Get the Top 10 Search Results for "orient"

Merriam-Webster Online

☒ Dictionary

☐ Thesaurus

Go



orient

Find

Tsunami

Disaster Relief

Click here for a list of charitable organizations from USAID.

Donate Now

Palm & Pocket

PC

Browse and download Merriam-Webster e-books and games for Palm and Pocket PC PDAs and Mobile Phones

Merriam-Webster Online Store

Merriam-Webster
Collegiate.com

14-day Free Trial

RELATED PROCEEDING APPENDIX

None